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In the Matter of)	
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Federal-State Joint Board on)	CC Docket No. 96-45
Universal Service)	

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REPLY COMMENTS OF CENTURY TELEPHONE ENTERPRISES, INC.
AND TDS TELECOMMUNICATIONS CORPORATION

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SUMMARY

Century and TDS Telecom focus here on how to evaluate and resolve issues under the Act, its legislative history and the existing record. However, to evaluate its implementation plans adequately under the Act's universal service principles and goals, the Joint Board should obtain comment and priceouts for specific proposals.

The record shows that the Benchmark Cost Model (BCM), as proposed and amended, cannot accurately predict carrier costs or satisfy the requirements of the 1996 Act. Even BCM proponents and supporters concede that changes are necessary. Compared to the network design and deployment experience of the 36 Century and 102 TDS Telecom rural LECs, the model's assumptions reflect larger LEC and denser area costs and seriously overestimate rural LEC costs. Economic analysis filed by BellSouth explains the limited usefulness and faults of the BCM and other "optimization model" proxies. Experimenting with the unreliable BCM (or any other proxy proposed in these proceedings) for rural LEC high cost recovery would conflict with the law's mandate for sufficient, specific, predictable federal high cost mechanisms used only to provide universal service.

Incumbent LECs have made huge investments in reliance on public utility principles that the Act largely abandons. Changing the rules and thwarting their capital recovery prospects after years of mandatory underdepreciation is unfair and vulnerable to legal and constitutional attacks. The comments show why only high cost recovery, based on actual embedded cost -- not incremental costs that prevent incumbent LECs from recovering joint and common costs -- can pass statutory muster, including the paramount mandate for reasonable rural and urban parity in services and rates, and can attract sufficient capital to preserve rural LECs' infrastructure development incentives.

Given the record and the need for prudence consistent with the Act's strong universal service commitment, the Joint Board should build on the successful USF and DEM weighting programs.

Before competition emerges in a rural LEC area -- and especially before a state could rationally designate an additional "eligible" carrier in such a rural area -- a means of optional disaggregation for averaged universal service high cost recovery to reflect geographic cost disparities must be found. Finally, concerns expressed in the record about NECA as USF administrator can be met. NECA has the experience to administer the new USF

well under the Commission's supervision and neutral rules.

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REPLY COMMENTS OF CENTURY TELEPHONE ENTERPRISES, INC. AND TDS TELECOMMUNICATIONS CORPORATION

Century Telephone Enterprises, Inc. (Century) and TDS

Telecommunications Corporation (TDS or TDS Telecom), on behalf of
their 36 and 102 incumbent local exchange carriers (LECs), submit
this response to comments filed April 12, 1996 in the abovecaptioned proceeding. Until the Joint Board or Commission
narrows this proceeding's focus to specific proposals that
affected parties can price out and evaluate thoroughly, Century
and TDS Telecom will concentrate on a few fundamental issues that
require resolution consistent with the 1996 Act and the intent of
Congress.

This reply explains, first, why the Benchmark Cost Model

(BCM) is inadequate for high cost identification purposes and

conflicts with the national universal service mandate; second,

why only actual embedded costs can adequately identify individual

LEC high costs for universal service cost recovery purposes;

third, why optional methods for disaggregating universal service cost recovery amounts must be designed to prepare for rural competition -- especially before a state can reasonably designate an additional eligible telecommunications carrier (ETC) to receive support in rural LEC study areas; and, fourth, why the Joint Board should appoint the National Exchange Carrier Association (NECA) to administer the expanded universal service programs.

- I. THE BENCHMARK COST MODEL WILL NEITHER PROMOTE RURAL UNIVERSAL SERVICE NOR SATISFY THE REQUIREMENTS OF THE 1996 ACT.¹
 - A. Even Supporters of the BCM Proposal Admit Its Faults.

A number of comments support the BCM.² However, most of the support is qualified or conditioned on rectifying major problems.³ Indeed, all proxy approaches remain controversial.⁴

¹Citations to first-round comments identify the filing party by abbreviation or acronym and provide the referenced page number.

²E.g., MCI at 10; Teleport at 7; U S West at 8.

³The BCM appears to be a moving target, with continuing changes that attempt to improve upon problems its critics raise.

⁴A second proxy proposal, submitted by Pacific Telesis, has been correctly challenged because it is proprietary and cannot be priced out or adequately evaluated. <u>E.g.</u>, Rural Telephone Coalition at 16; Teleport at 8.

For example, a group of commissions in rural states advocate further exploration of the BCM, but caution (p. 6) that

[b] efore the BCM is even considered for use, its sponsors should provide sufficient information to show that its results bear some relationship to the actual cost of providing service today.

NECA also apparently endorses some continued efforts to find a proxy methodology or other alternative cost identification methods, but awaits proposals "that assure the availability of 'sufficient' funds for universal service," as Section 254(e) of the Act requires. One strong advocate admits that the BCM "will certainly require adjustment and fine-tuning," noting such shortcomings as overstated costs owing to the exclusion of business and inappropriate assumptions about switching costs. Indeed, even one of the BCM's sponsors, MCI continues (p. 11) to urge numerous modifications, tentatively encouraging (p. 12) the use of "BCM or some other proxy cost model."

Opponents are not tentative. Southwestern Bell (p. 14) "has analyzed the BCM" and states that "it does not provide a reasonable comparison to actual costs by study area (company) or

⁵Telecommunications Resellers Association at 12. Another supporter, Teleport (pp. 7-8), adds to the list of BCM shortcomings, criticizing the BCM's mistaken assumption that the population density in Census Block Groups is uniform.

by wire center." It adds that even the sponsors concede that the BCM model fails to define actual company costs, let alone the actual embedded costs which remain to be recovered. BellSouth provides analysis by two economists confirming that the BCM is not useful to determine absolute cost levels, and, at most, indicates only relative geographic costs. The BellSouth paper also discusses in detail both the specific flaws in the BCM and the general difficulty of developing any reliable proxy based on an "optimization model" divorced from diverse real-world conditions.

B. The BCM Is Not Designed to Identify Rural LEC Costs

Century and TDS Telecom agree with the widely-held view that
the BCM and other proxies fail to identify high costs for rural
LECs, including their affiliated rural LECs. Their view is
supported by analysis of the BCM assumptions and data, based on
TDS's and Century's network design. Their analyses indicate that
the BCM would substantially overstate network costs, in part
because it rests on flawed assumptions that totally ignore rural
differences. Among the faulty BCM assumptions that would
overstate costs (either from the outset or in the long run, as

⁶BellSouth, Appendix, K. Gordon and W.E. Taylor, Comments on Universal Service at 36-40 (April 12, 1996).

network upgrades occur), Century and TDS have found (a) overestimates of switching costs and failure to consider alternative rural switching configurations; (b) use of more costly digital loop carrier costs in estimating costs than Century and TDS have encountered; (c) assumptions about general outside plant cable sizing, both at the time of installation and when future growth and development occur, that do not apply for rural LEC areas; (d) development of costs for copper outside plant cables based on (1) cable sizes that are two or three times (or more) the typical sizes of the TDS Telecom and Century LECs' feeder plant and (2) a range of copper distribution plant cable sizes that assumes cable sizes many times what TDS and Century LECs typically require, (e) deriving costs for fiber outside plant cable based on sizes that significantly exceed the fiber cable sizes typically procured by TDS and Century LECs; and (f) positing digital service areas (DSA's) of 12,000 feet in radius, when rural LECs' experiences differ. TDS has found that its rural LECs can only justify a DSA of 18,000 feet in radius -- a difference with enormous impact on DSA implementation costs. Analysis of the BCM also disclosed other questionable cost factors, for which information is too scanty for reliable comparison to rural LEC costs. Like the factors listed above,

these also seem to reflect large LEC operating characteristics in areas more urban than the serving territory of the Century and TDS LECs.

In addition, even if a computer model were developed to relate CBGs to wire centers, the simplified assumptions that pertain to CBGs will not properly reflect real-life engineering considerations. The CBG approach ignores many aspects of terrain and LEC service boundaries, since CBG boundaries are assumed to be squared-off. Moreover, the TDS and Century LECs, like other rural study areas, fall almost entirely at the most rural end of the rural density range assumed by the CBG framework: The histograms at Appendix A and Appendix B indicate that all TDS exchanges are below the "rural" CBG definition of less than 850 lines per square mile; 99% of TDS exchanges and 98% of Century exchanges are in areas with density of less than 200 lines per square mile; and 93% of TDS and 86% of Century exchanges are in areas of 50 lines per square mile or less. Finally, the data reflect total access lines. Excluding business lines (as the BCM does) would further widen the gap between TDS and Century LEC density and CBG density assumptions. Plainly, much of what the BCM analysis considers rural is not representative of TDS, Century or other rural LEC systems.

C. The Flaws in the BCM Foreclose Using the Results as a Surrogate for Actual Rural LEC Costs in Universal Service Mechanisms.

The inability of the BCM to identify rural LEC costs accurately has profound implications for implementing the universal service provisions of the 1996 Act. An inaccurate proxy cannot take into account the enormous variations in small and rural LEC costs. Thus, identifying high costs using a model designed for the "general" or "average" use would necessarily leave the Joint Board with insufficient information even to speculate about whether federal high cost recovery would be "sufficient," as required, to achieve the universal service purposes prescribed by Section 254(e). Nor could it apply the requirement in the same section that federal high cost recovery be used solely for intended universal service purposes.

Moreover, although the BCM seems to overstate costs, making insufficient cost recovery less likely despite small and rural study area variances. Century and TDS Telecom believe that a plainly excessive cost recovery mechanism will be both

⁷TDS showed in its Reply Comments in CC Docket No. 80-286 that small LEC costs are too varied for capture by a proxy.

⁸GVNW accurately points out (p. 15) that "reimbursement of actual cost is an absolute way to assure that companies have used the support for the intended purpose."

unsustainable and subject to legal attack. Rural study areas cannot risk losing adequate universal service mechanisms because an experimental proxy scheme provides too much recovery. The grossly overstated BCM costs would also inefficiently stimulate entrants to establish service in rural areas and seek ETC status to exploit the opportunity to reap windfall profits. Such market distortions would not be consistent with the generally expected benefits and cost discipline of competition. Thus, using the BCM in the form developed so far would conflict with all of the 1996 Act's major purposes: robust competition; effective, efficient and sustainable universal service and minimal regulatory distortion consistent with achieving the first two purposes.

II. RURAL TELEPHONE COMPANIES SHOULD RECEIVE SUPPORT BASED ON THEIR EMBEDDED COSTS AT LEAST UNTIL GENUINE COMPETITION ARRIVES AND HIGH COST RECOVERY CAN BE DISAGGREGATED.

Incumbent local exchange carriers have deployed capitalintensive universal service networks under a regulatory regime
where cost recovery was the <u>quid pro quo</u> for their public
interest obligations, including depreciation rates typically
prescribed at levels chosen to maintain low rates. Changing the
public utility paradigm without an adequate, reliable new system

⁹See, NECA at 10-11; Southwestern Bell at 2-3.

and suitable transition could saddle incumbent rural LECs with stranded investment and sap their incentives to invest in network improvements.

The Act, however, mandates rural services and rates commensurate with urban services and rates. Where low population-density and traffic volume limit profit opportunities for new entrants, competition will be slower to appear, unless mistaken regulatory policy encourages inefficient entry. Thus, it makes sense to preserve actual embedded LEC costs and the successful USF and DEM weighting mechanisms as the basis for federal high cost recovery for rural telephone companies. As other comments also point out, USF and DEM weighting have worked well to bring universal service and network upgrades to rural areas. 10 The rules developed here should build upon that firm foundation. Cost recovery will match actual investment, high cost compensation will be "specific" and "predictable," and the Commission will be able to assess whether federal high cost compensation mechanisms are both "sufficient" and confined to providing universal service.

¹⁰E.g., Rural Telephone Coalition at 15-16; USTA at 16; Southwestern Bell at 17; JSI at 6-9; NECA at 6-7. See, also, Wyoming PSC at 2, 17-18.

Experimenting with untried cost identification schemes is especially risky for residents and businesses in areas where Congress has tempered the dislocations of major policy changes by forging several rural-specific approaches. 11 Support based on actually incurred costs, by maintaining adequate universal service cost recovery, will preserve positive incentives to develop the rural infrastructure. Again, the law now mandates both comparable rural and urban services and nationwide access to advanced telecommunications and information services. 12 In the absence of competition, there is also no reason even to consider abandoning "just, reasonable" rates and compensation that together cover real-life costs for meeting the challenges of providing rural universal service. Indeed, given their unique regulatory background and ongoing obligations, denying LECs the opportunity to recover prudently incurred investment in used and useful plant also raises serious constitutional issues.13

Jeopardizing cost recovery by adopting ill-suited costing .
methodologies is equally inappropriate. Proposals to identify

¹¹For example, rural needs inspired sections 254(e); 251(f); 253(b) and (f); 254; and 259.

¹²Section 254(b)(2) and (3).

¹³WRTA at 10-12; United Utilities at 2.

costs by incremental cost or TSLRIC do not permit recovery of a contribution towards joint and common costs and may shield some services from contributions required by law. 14 Economics Professor John Panzar has explained why rural LECs may be unable to survive financially under market-driven, theoretical cost recovery assumptions, since their marginal cost may be below average cost. 15 If small and rural LECs cannot demonstrate a reasonable opportunity to recover adequate contribution to their joint and common costs, the capital necessary to provide access to "advanced telecommunications and information service" to achieve the principles in Section 254(b)(2) and (3) will not be available. As Harris, Skrivan & Associates explained (pp. 14-15), the only conclusion TSLRIC can justify here is that a service recovering that level of costs is not subsidized. "The only reasonable answer to allocation of jointly-used plant," the cost consultants continue, "is for all services to make a contribution to Common Line costs." The same conclusion holds true for all joint and common costs.

The system based on national high cost recovery arrangements

¹⁴ See, U S West at 11.

¹⁵J.C. Panzar, <u>The Continuing Role for Franchise Monopoly in Rural Telephony</u>, pp. 7-9 (1987).

for already-incurred, actual high costs has successfully built, maintained and improved services and network capabilities in rural areas, widespread subscription and reasonable, affordable rates. The case has not been made for adopting a drastically different cost identification or high cost compensation scheme for rural areas, where competition will be slower to develop.

III. ADVANCE PREPARATIONS ARE NECESSARY FOR COMPETITION IN RURAL AREAS.

As noted (p. 8, above), Congress recognized rural differences and preserved a larger measure of state authority to cope with potential problems in the transition to competition. A state's implementation of the Act may include individual or consolidated (§ 252(g)) determinations about ETC designation for rural areas, rural interconnection, exemptions and modifications, the "rural markets" authority to require ETC status for rural competitors and other issues raised by integrating the new federal law with state requirements.

Before competition reaches RTC service areas -- and particularly before additional ETC is designated under the special rural public interest standard -- preparation should be made to pave the way for necessary changes in rules and practices. First, it would be important to work out the

practical and legal problems with proxies before trying to use one for incumbents or newcomers. Southwestern Bell correctly states (p. 13) that it is reasonable and not overly burdensome to require all ETCs to provide actual cost data as incumbent LECs do. However, some accurate but unburdensome means to disaggregate high cost below the study area level must be found to accommodate all rural competition. 16

The Century and TDS comments showed (pp. 10-11) why using the incumbent's costs to calculate universal service cost recovery for a competing ETC violates the law and invites windfall-driven entry, not real competition. Using overinflated BCM costs for new ETCs would also distort the market, violate the law, and overburden the customers of contributing carriers.

A state cannot responsibly make the required public interest finding designating a competing rural ETC until some method has been designed to allow the incumbent to disaggregate its high cost recovery within a RTC study area. As the Rural Telephone Coalition explained (p.13), costs within a rural study area vary

¹⁶NECA at 9-10; Rural Telephone Coalition at 11-13.

¹⁷As explained <u>infra</u>, the need for disaggregation of high cost recovery is not confined to the case of another eligible carrier.

in their divergence from average costs for that area. Allowing another ETC to use a combination of its own facilities and resale will unfairly subsidize the new entrant for cream skimming, to the detriment of the incumbent's residual ratepayers, unless the incumbent has the option of disaggregating. Providing averaged high cost compensation throughout the rural study area would encourage the new ETC to construct facilities where the average high cost recovery would provide a premium over its actual costs, and resell the incumbent ETC's subsidized service in higher cost locations. In contrast, the incumbent would lose the average high cost amount in the relatively lower cost locations because the overcompensated carrier could charge below cost rates. Only the average high cost compensation would be allowable where the incumbent's costs exceed the average, and the reseller would have the benefit of that support. High cost support designed to benefit customers would thus become a windfall and a competitive advantage for the new ETC. This siphoning away of customer benefits and infrastructure investment incentives for outlying rural areas also illustrates why high cost mechanisms should be available only for an ETC's facilities-based service. 18

¹⁸ Rural Telephone Coalition at 15.

Even without another ETC, a rural LEC needs the option to disaggregate its support when competition appears. Losing recovery in its densest, lowest cost area would still leave the incumbent with its outlying higher cost service, with less federal cost recovery to compensate it for that service. Thus, federal high cost mechanisms would need to be more geographically targeted to match high cost recovery to the highest cost locations.

IV. NECA WILL BE THE MOST EFFICIENT ADMINISTRATOR FOR THE NEW UNIVERSAL SERVICE MECHANISMS.

There is support from state commissions¹⁹ and others²⁰ for naming NECA to administer the new universal service mechanisms.

Commenters point to its experience in administering the USF,

Lifeline Assistance and the TRS mechanism. A single

administrator of the federal fund would provide uniformity,

efficiency and predictability for federal universal service

¹⁹E.g., Wyoming PSC at 5; South Carolina PSC at 2; Pennsylvania PUC at 25.

²⁰E.g., Colorado Independent Telephone Association at 2; Frederick & Warriner at 4.

decisions. As others stated, 21 multiple state commissions would not.

Critics alleging that NECA will favor its members should remember that NECA is subject to Commission supervision and audit and has offered to create an advisory body with representatives of other interested parties. The Commission's neutral rules control how federal universal service mechanisms are carried out. NECA has the data and expertise to follow the Commission's neutral rules. Moreover, as USTA (p. 25, n. 33) and the Rural Telephone Coalition (p. 19) indicate, NECA can administer universal service mechanisms under a structure that also would retain its important role in preparing and defending tariffs and administering the non-traffic sensitive and traffic sensitive pools for incumbent LECs.

Conclusion

The Joint Board should narrow the universal service issues and obtain evaluation and price outs of specific proposals before adopting recommendations. Absent unanticipated breakthroughs in reliability and sensitivity to LEC variations, the extremely inaccurate BCM and other proxy proposals cannot be

²¹Rural Telephone Coalition at 19; Oregon and Washington Independent Telephone Association at 16-17; Missouri PSC at 21.

imposed on rural LECs for compelling legal and practical reasons. In fact, the Act and the record to date can only justify universal service mechanisms based on the actual embedded costs of incumbent LECs and their competitors. That course also will provide the only lawful and fundamentally fair recovery of incumbent providers' investments made in reliance on the traditional utility compact, while avoiding the suppression of rural infrastructure improvements and unreasonable rural rate dispari-To maintain sufficient cost recovery for the highest cost parts of high cost rural areas in the face of competition -- and particularly before a state can find public interest justification for high cost compensation to an additional rural provider -- an acceptable option for disaggregating high cost recovery and targeting federal high cost compensation must be developed.

Finally, NECA's experience and efficiency, the Commission's neutral rules and authority to supervise and audit NECA, NECA's advisory council proposal and NECA's ability to continue to perform its role in developing, defending and administering LEC tariffs and pools under an appropriate structure should allay

concerns about appointing NECA to administer the new universal service mechanisms.

Respectfully submitted,

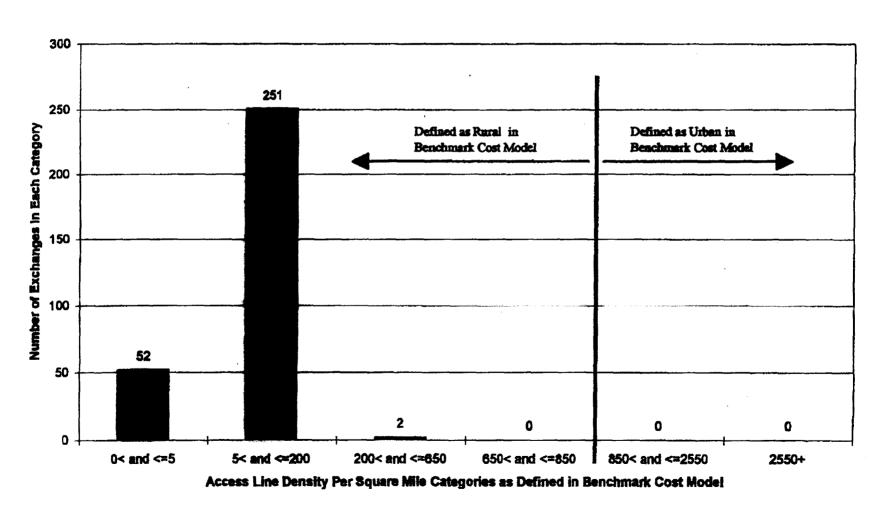
CENTURY TELEPHONE ENTERPRISES, INC. and TDS TELECOMMUNICATIONS CORPORATION

By /s/ Margot (Smiley Humphrey)

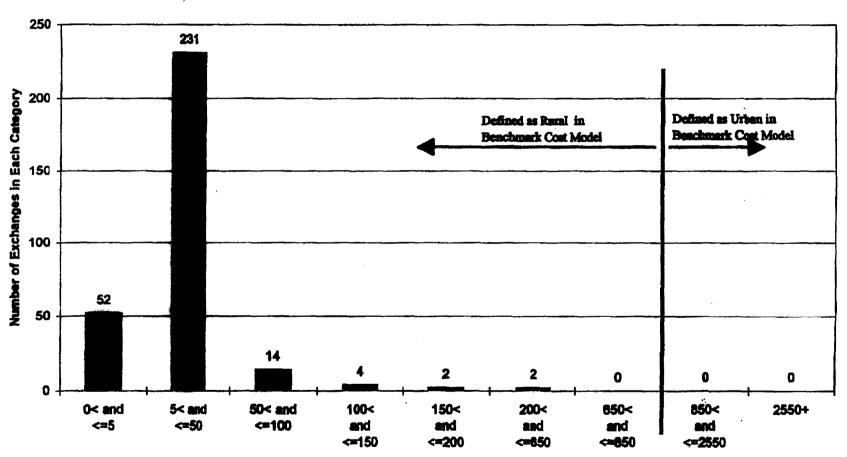
Margot Smiley Humphrey

May 7, 199

TDS TELECOM HISTOGRAM OF ACCESS LINE DENSITY PER SQUARE MILE BY EXCHANGE



TDS TELECOM HISTOGRAM OF ACCESS LINE DENSITY PER SQUARE MILE BY EXCHANGE



Access Line Density Per Square Mile Categories as Defined in Benchmark Cost Model